

**To:** Vogel, Dana[Vogel.Dana@epa.gov]; Rowland, Jess[Rowland.Jess@epa.gov]  
**From:** Housenger, Jack  
**Sent:** Wed 7/23/2014 12:25:48 PM  
**Subject:** FW: Press Conference heads up

**From:** Jones, Jim  
**Sent:** Wednesday, July 23, 2014 7:35 AM  
**To:** Strauss, Linda  
**Cc:** Housenger, Jack  
**Subject:** Fw: Press Conference heads up

Fyi. No action needed

Jim Jones  
Assistant Administrator  
Office of Chemical Safety and Pollution Prevention  
Sent from my BlackBerry 10 smartphone on the Verizon Wireless 4G LTE network.

**From:** Cullman, Constance (CE) <[CECullman@dow.com](mailto:CECullman@dow.com)>

**Sent:** Tuesday, July 22, 2014 3:21 PM

**To:** Jones, Jim

**Subject:** Press Conference heads up

Hi Jim-

Just wanted to let you know that Dow AgroSciences has been asked for a statement regarding a briefing/press conference being held by DeFazio and EWG at the Cannon House Office Building tomorrow at 10:00 am (see below). We are preparing a response as is CropLife America.

Please let me know if I can answer any questions you may have. I can be reached on my cell number below.

Best Regards,

**Constance Cullman**

Dow AgroSciences

U.S. Federal Government Affairs Leader

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Ex. 6 - Personal Privacy



**Dow AgroSciences**

*Solutions for the Growing World*

## The Environmental Working Group (EWG) - Briefing

| [+Add to my calendar](#)

When

Wed Jul 23, Jul. 23 at 10:00 am

Where

441 Cannon House Office Building

Topic

The Environmental Working Group (EWG) holds a briefing on the health risks linked to 2,4-D exposure, in reaction to a request by Dow AgroSciences to Environmental Protection Agency to sell a new toxic herbicide known as "Enlist Duo," a combination of 2,4-D and glyphosate.

Participant(s)

Philip Landrigan, dean for global health at Mount Sinai School of Medicine; Catherine Thomasson, executive director at Physicians for Social Responsibility; Doug Gurian-Sherman, senior scientist at the Center for Food Safety; Gary Hirshberg, co-founder of Stonyfield Farm and chairman of Just Label It; John Wargo, professor of environmental health and politics at Yale University; and Scott Faber of EWG

## Contact

Sara Sciammacco, 202-939-9122; or Abigail Seiler, 202-547-9359 [Note: Media and congressional staffers must RSVP to Sara Sciammacco at [ssciammacco@ewg.org](mailto:ssciammacco@ewg.org) or Abigail Seiler at [aseiler@centerforfoodsafety.org](mailto:aseiler@centerforfoodsafety.org)] (+WAGE036+)

Report from Philip Landrigan, dean for global health at Mount Sinai School of Medicine & Participant in tomorrow's briefing:

**Children are uniquely vulnerable to the health effects of pesticide exposure.** Application of pesticides for cosmetic purposes results in human exposure through contact with grass, soil, and other surfaces. Additional exposure can result from drift from spray applications. Pesticide exposures can have toxic effects on health.

Children are especially vulnerable to pesticides, because their age-appropriate hand-to-mouth behaviors, their closer proximity to the ground, and their higher breathing rates place young children at increased risk for pesticide exposures compared with adults<sup>1</sup>. The Centers for Disease Control and Prevention has found that children age 6-11 have higher levels of common pesticides in their bodies, indicating higher exposure<sup>2</sup>. Furthermore, some pesticides can pass from mother to fetus during pregnancy and breastfeeding. These are very troubling findings due to the exquisite vulnerability of the fetus and early neonate to toxic exposures<sup>3, 4</sup>.

Children's vulnerability to chemical pesticides is further magnified by the rapid growth and development of their nervous systems and other bodily organs as well as by their immature detoxification mechanisms, which make it very difficult for infant to break down and excrete pesticides after they have been exposed. These factors place infants and children at increased risk for harmful effects of pesticide exposures, which may be permanent and irreversible<sup>5</sup>. Additionally, because of their young age, children have more future years of life and therefore more time to develop chronic diseases that may be triggered by environmental exposures in early

life.

**Health Effects of Pesticide Exposure.** Acute exposure to pesticides can lead to asthma exacerbations, cough, shortness of breath, nausea, vomiting, eye irritation, and headaches<sup>6</sup>. Additionally, pesticide exposure early in life is associated with increased risk of certain cancers<sup>7-9</sup>, birth defects<sup>10, 11</sup>, reproductive defects<sup>12, 13</sup>, asthma<sup>14, 15</sup>, and cognitive and behavioral problems<sup>16-20</sup>.

The association between pesticide exposure and impaired neurodevelopment in children is not surprising. Pesticides are deliberately designed to be toxic chemicals. A large number of pesticides have been deliberately engineered to attack cellular targets in the nervous systems of insects. Given that many of these same cellular targets are present in the human nervous system, children are highly vulnerable. For example, children with prenatal exposure to the organophosphate pesticide chlorpyrifos show decreased intelligence, smaller head circumference at birth, which is a marker for retarded brain growth, and changes in the brain that are evident on MRI, indicating that changes in brain structure have occurred<sup>21</sup>. Notably, the exposure levels measured in these studies are similar to those detected in the general public, indicating that even low levels of exposure from household use can be detrimental.

Early life exposures to commonly used lawn and garden pesticides such as glyphosate, 2,4-D, and permethrin, are associated with cancer<sup>22</sup>, neurotoxicity<sup>23</sup>, and endocrine disruption<sup>24,25</sup>.

Finally, greater than 95% of most pesticide formulations consist of “inert” ingredients. Recent studies suggest that these “inactive” compounds may in fact be more toxic than the active ingredient<sup>26, 27</sup>. Because inert ingredients are not listed on the label and testing to assess safety is minimal, the health effects of these compounds are difficult to evaluate<sup>28</sup>.

**Preventing the Health Hazards of Pesticide Exposure.** The adverse health effects that result from pesticide exposures are highly preventable. A ban on the cosmetic use of pesticides will have positive effects on a wide array of health outcomes.

Historically, policy changes in pesticide regulation have successfully reduced exposures among the population. For example, after the EPA ban on residential uses of chlorpyrifos, there was a ten-fold reduction in maternal and umbilical blood levels of chlorpyrifos<sup>29</sup>.

Several U.S. states and municipalities have banned cosmetic application of lawn pesticides in public areas that are utilized by children. The ban on cosmetic herbicides across nearly 80% of Canada has contributed to significant reductions in their use without negatively affecting the lawn care industry<sup>30</sup>. Levels of the three most common pesticide chemicals dropped by 80% in urban streams in Ontario following the ban<sup>31</sup>.

A 2005 analysis calculated that pesticide use in the U.S. results in \$10 billion in total damages annually, of which an estimated \$1.1 billion could be accounted for by impacts on public health<sup>32</sup>. These indirect costs greatly outweigh the expense of integrated pest management and other non-toxic lawn care methods.

**Conclusion** Children are at risk for pesticide exposures at daycares, schools, on playing fields, playgrounds, and other public areas where lawn pesticides are routinely applied—a risk that could easily be reduced by legislation that would restrict the use of synthetic lawn pesticides. I urge you to take steps to protect the health of your constituents by supporting a ban on the cosmetic use of pesticides.

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